

The inventor hereby states his intent to rely on the Doctrine of Equivalents to determine and assess the reasonably fair scope of his invention as pertains to any apparatus not materially departing from but outside the literal scope of the invention as set out in the following claims.

Claims:

1. A fireworks artillery shell comprising:
 - a casing;
 - a lift charge received in the casing;
 - an ignition fuse extending from the exterior of the casing into the lift charge;
 - an effects charge received in the casing;
 - a lower seal of sealing material received in the casing and in sealing engagement therewith, and positioned below the effects charge and between and separating the lift charge and the effects charge;
 - a timing fuse extending through the lower seal and operatively connecting the lift charge and the effects charge; and
 - an upper seal of sealing material received in the casing and in sealing engagement therewith above the effects charge and opposite the lower seal,
- said lower seal and upper seal being provided of a substantially incombustible material which seals against the casing.
2. A fireworks artillery shell as set forth in claim 1, further including a paper wafer positioned between the lower seal and the effects charge.
3. A fireworks artillery shell as set forth in claim 1, further including a paper wafer positioned between the upper seal and the effects charge.
4. A fireworks artillery shell as set forth in claim 1, wherein the casing is a cylindrical paper tube.
5. A fireworks artillery shell as set forth in claim 4, wherein the tube is substantially seamless and imperforate in the area between the upper seal and the lower seal.
6. A fireworks artillery shell as set forth in claim 4, wherein the tube has an upper end and a lower end, and the upper seal extends substantially across the upper end and the lift charge extends substantially across the lower end.
7. A fireworks artillery shell as set forth in claim 1, wherein the sealing material is clay.

8. A method of making a fireworks artillery shell comprising the steps of:
providing a tubular casing and placing an effects charge therein;
sealing the effects charge within the casing by placing an upper seal across the
casing above the effects charge and a lower seal with a timing fuse
passing therethrough and into the effects charge across the casing below
the effects charge;
inserting a lift charge into the casing below the lower seal with the timing fuse
in operative communication with both the effects charge and the lift
charge; and
placing an ignition fuse in communication with the lift charge.
9. A method of making a fireworks artillery shell as set forth in claim 8,
wherein the upper seal and the lower seal are provided of clay, and
further including the step of compressing the clay against the effects
charge and the casing.